

A New Species of True Katydid from Western Texas (Orthoptera; Tettigoniidae).

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Pterophylla excelsa new species.

General appearance and form similar to *P. camellifolia* (*Cyrtophyllus perspicillatus* of authors); general form of pronotum similar to that species but resembling that of *Paracyrtophyllus robustus* in the caudal margin of the disk, which is subtruncate, and in the length of the same which is less than the greatest width; ventral margins of lateral lobes of pronotum differ from all other North American species in being moderately oblique, declivent cephalad. Subgenital plate of males distinctive in form and reaching beyond the tips of the tegmina, but apparently showing a development of the type found in *Paracyrtophyllus robustus*. Cerci of male distinctive but showing nearest affinity to *Lea floridensis*.

Type.—Male; Moss Well, foot of Pulliam Bluff, Chisos Mountains, Texas. September 5-8, 1912. Elevation 4700-5000 feet. (Rehn and Hebard.) [Hebard Collection.]

Size and general form similar to *camellifolia*. Head larger and broader than in that species, with fastigium of the vertex more decidedly produced in a spine which projects distinctly beyond the plane of the face; face much flattened, with lateral margins distinctly defined in weak ridges, these ridges subobsolete dorsad; labrum distinctly broader than in *camellifolia*. Pronotum similar to *camellifolia* in contour, transverse sulci and lateral canthi, but with length of disk less than greatest (caudal) width and with caudal margin subtrun-

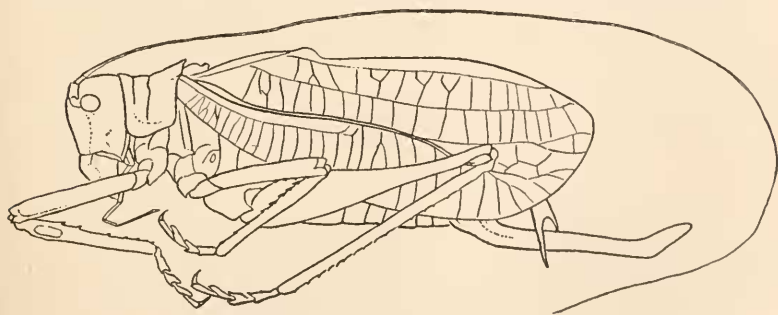
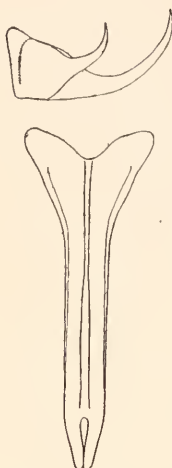


Fig. 1.—*Pterophylla excelsa* n. sp.—Lateral outline of type. (x 2.)

cate; lateral lobes with ventral margin moderately oblique, declivent cephalad with ventro-cephalic angle more broadly rounded than ventro-caudal angle, which is distinctly more ample, weakly obtuse-angulate.



Pterophylla excelsa n. sp.

Fig. 2.—Cercus of male.

(x 5.)

Fig. 3.—Ventral outline of subgenital plate of type. (x 2½.)

Tegmina much less ample than in *camellifolia*, with veinlets more regular and pronounced, stridulating area much as in that species. Wings almost as long as tegmina, by which they are wholly concealed. Limbs and armament of same as in *camellifolia*. Supra-anal plate somewhat longer than broad, sulcate meso-proximad, beyond this portion moderately expanding, with distal margin subtruncate and moderately serrate. Cerci evenly rounded at base, then forking at a distance equal to the basal width and produced in two very slender and little divergent spines which have an even inward curvature, the outer spine nearly twice as long as the inner (dorsal) spine. Subgenital plate nearly as long as the caudal femur; the heavy margins of the produced shaft forming a broad, deep mesal groove both dorsad and ventrad; apical portion split, with the two parts distinct but attingent distad, this portion directed dorsad at a very broad obtuse angle to the produced and horizontal shaft.

Allotype.—Female; Chisos Mountains, Texas. July, 1911. (H. A. Wenzel.) [Academy of Natural Sciences of Philadelphia.]

Similar to the type, but larger. Supra-anal plate longer than broad, distal margin rotundato-truncate. Cerci long, nearly straight, terminating in a sharp tooth. Ovipositor similar to that of *camellifolia*. Subgenital plate nearly divided mesad into two very narrow and transverse lateral lobes, leaving the base of the ovipositor exposed.

Measurements (in millimeters).

	Length of pronotum	Caudal width of pronotum	Length of tegmen	Greatest width of tegmen	Length of caudal femur	Length of subgenital plate
Type, male	5.	5.9	27.2	11.7	18.9	16.9
Paratypes, males...	4.7-6	5.6-7	24.8-31.9	10.8-13.1	17.8-22.6	16.7-18.9
Allotype, female ...	5.3	6.7	36.4	13.1	23.7

The ovipositor of the allotype is 16.8 mm. long and 3.1 mm. in greatest width.

The tegminal measurements are given for these organs in their convex natural condition; were the tegmina flattened out a decided increase in length and width would result. The type is about the average for the series of males taken by the authors; the male taken earlier in the season with the allotype is very large.

In life the specimens were jade green; this color has become pale on the body and limbs in the majority of dried specimens. The eyes are walnut brown.

The present species is known only from the Chisos Mountains, situated in the southern portion of the Great Bend region of the Rio Grande in western Texas. The following field notes were taken: "This species is everywhere on the hillsides above 4700 feet elevation in low oaks (15 to 25 feet in height) and at dusk the males begin their incessant song which is continued through the night. This song consists of a single rasping note, quuck—quuck—quuck, repeated incessantly and very deliberately. One was startled into giving this note in the early afternoon of a cloudless day when a rifle was fired over the cañon. The specimens are found in the trees usually near the lower branches, perched upon the twigs among the leaves; they are very hard to locate, but when the collector has climbed into the tree an individual will usually recommence its song if he keeps still under it for a few minutes. When closely approached they invariably leap clumsily into space, unless quickly seized, and upon hitting the ground at once begin to crawl away. When seized they often utter their note in an irritated manner."

Specimens examined.—25; 24 males and 1 female.

Chisos Mountains, Texas, July, 1911 (H. A. Wenzel), 1 male, 1 female, *paratype*, *allotype*, [A. N. S. P.].

Moss Well, Chisos Mountains, Texas, September 5-8, 1912, (R. and H.), 23 males, *TYPE*, *paratypes*, [Hebard Collection and A. N. S. P.].

Diptera at High Altitudes.

Prof. T. D. A. Cockerell, in the *Entomologist* for April, 1914, notes that he collected, August 28, 1913, *Stomoxys calcitrans*, *Phormia terrae-novae*, *Musca domestica* and *Allograpta obliqua* at timber line, 11,200 to 11,300 feet altitude, on the Long's Peak trail, Colorado.